WEICON GmbH & Co. KG

Why we are a carbon-neutral company

Climate change is the greatest challenge facing humanity since the end of the ice age and is the defining issue of our time. The consequences of global warming are becoming more and more noticeable and the pressure on politicians and companies is increasing. There is now a global consensus that we urgently need to combat man-made climate change.

The success of emission reductions depends to a large extent on voluntary and consistent action taken by the industrial sector in the developed countries. Thus, we at WEICON GmbH & Co. KG are ready to assume responsibility for the world we leave to our children and grandchildren.

For this reason, we have had the greenhouse gas emissions caused by our company's activities recorded and offset by purchasing climate protection certificates for the years 2022 and 2023. With these certificates, we support a hydropower project in Turkey that was certified under the leadership of VERRA based on the Verified Carbon Standard.

We are aware of our special responsibility as a company towards future generations and have acted accordingly. Fokus Zukunft GmbH & Co. KG calculated the climate impact of our company for us.

Based on the figures they determined, we purchased a corresponding number of climate certificates and therefore made our headquarters in Germany carbon neutral. We have received the "Climate Neutral Company" award for offsetting our greenhouse gases.

Why is our company committed to global climate protection?

The global community has agreed that global warming must be limited to below 2 degrees Celsius – or even better to 1.5 degrees – to prevent disastrous consequences. But the current pledges of the individual states are only sufficient to limit warming to a maximum of 4 degrees. In order to close this discrepancy gap, an additional major commitment is needed from companies as well as from citizens. We understand that the voluntary reduction of emissions and the offsetting of unavoidable emissions are essential to tackling climate change effectively. Consequently, we have decided to neutralise our carbon emissions and thus to contribute to a future worth living in.

This makes our company one of the first in our industry to voluntarily offset its emissions under the Clean Development Mechanism.

What is a carbon footprint?

The carbon footprint is the measure of the amount of greenhouse gases (measured in CO_2 equivalents) produced directly and indirectly by an activity of an individual, a company, an organisation or a product. It includes the emissions that are related to raw materials, production,

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transport, trade, use, recycling and disposal. The rationale of the carbon footprint is to create a basis on which influences on the climate can be measured, evaluated and compared. In this way, potential for reduction may be identified, measures developed and their effectiveness evaluated.

The corporate carbon footprint is the total amount of GHG emissions that are caused by a company's activities, and the product carbon footprint measures the total GHG emissions generated by a product.

What does carbon neutrality mean?

According to the principle of the Clean Development Mechanism set out in the Kyoto Protocol, greenhouse gases that are produced in one place on earth and cannot be avoided should be offset by climate protection projects in another place. To finance these, companies buy certificates of corresponding climate protection projects from the six available project sectors (biomass, cooking stoves, solar energy, forest protection, hydropower and wind energy). Each certificate represents one tonne of CO_2 that is offset by the respective project. There are numerous climate protection projects worldwide, most of which support renewable energy projects. The initiators of these projects receive emission credits for their commitment, which can be traded in the form of climate protection certificates. The amount is measured, for example, by comparative methods against the emissions that would have resulted from the construction of a coal-fired power plant.

How was the quantity of carbon emissions calculated by our company?

We commissioned the external sustainability consultancy Fokus Zukunft to calculate our company's carbon footprint. The emission balance was calculated using the official guideline of the Greenhouse Gas Protocol.

What is reported under the Greenhouse Gas Protocol?

Emissions are divided within the Greenhouse Gas Protocol according to Scopes 1, 2 and 3, each comprising different types of greenhouse gas emissions. Scope 1 includes direct emissions from own energy plants. Scope 2 records emissions that are indirectly generated in the provision of energy for the company. Scope 3 emissions are additional indirect emissions that occur throughout the value chain.

Which greenhouse gases are included in the calculation?

The calculation of greenhouse gas emissions includes the seven main greenhouse gases defined by the Intergovernmental Panel on Climate Change (IPCC) and the Kyoto Protocol: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3) and sulphur hexafluoride (SF_6).

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What are CO_2 equivalents?

The seven main greenhouse gases are not equally climate-damaging. Methane, for example, is 21 times more harmful to the climate than CO_2, nitrous oxide 310 times and sulphur hexafluoride even 14,000 times. In order to compare emissions, all greenhouse gases are therefore converted to CO_2. This is then called the CO_2 equivalent.

How is the collected consumption data converted into greenhouse gas emissions?

The conversion of the collected consumption data (such as electricity or fuel consumption) is done by means of emission factors, which indicate the emissions per unit (e.g. per kilowatt hour of electricity or litre of petrol). The emission factors come mainly from DEFRA (Department for Environment, Food and Rural Affairs), but also from the GEMIS database (Global Emissions Model for Integrated Systems, IINAS) and the Ecoinvent database, and are updated regularly.

How are emission certificates generated?

The initiators of these climate protection projects, most of which are renewable energy projects, receive emission credits for their commitment, which can be traded in the form of climate protection certificates. The amount of emissions to be offset is measured, for example, by comparative means against the emissions that would have resulted from building a coal-fired power plant as opposed to generating renewable electricity.

What quality criteria do the climate protection projects fulfil?

The climate protection projects purchased by us are each accredited, approved and monitored according to one of the three internationally recognised certification standards – VCS (Verified Carbon Standard), UN CER (Certified Emission Reduction of the United Nations) or the Gold Standard developed by WWF. The verification of the project results in terms of the carbon savings that have been achieved is certified by independent verification bodies, such as the German TÜV.

What happens to carbon certificates after they have been purchased?

The acquired number of carbon certificates are “retired” after purchase, i.e. they are removed from the marketplace, not to be resold. This is important as it is a prerequisite for the design and marketing of carbon-neutral companies and/or products. Without its removal from the marketplace, a carbon certificate may continue to be traded in the voluntary market, which would not achieve any additional emission reduction.

Which projects are supported by the purchased certificates?

With our certificates, we support a hydropower project in Turkey that was certified under the leadership of VERRA based on the Verified Carbon Standard. The project is a run-of-river power station without a dam on the Uzundere stream in the Turkish Rize province. The aim of the project is to generate electricity from hydropower and feed it into the national grid.

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The hydropower project provides affordable and clean energy, creates decent jobs and economic growth, and contributes to climate protection by eliminating the use of fossil fuels. We chose Turkey as a location for “personal reasons”, as we have our own branch here.

Why are international projects supported?

Climate change is global, so it does not matter where in the world carbon is offset. The Kyoto Protocol, which is binding under international law, stipulates that climate protection projects that avoid or store greenhouse gas emissions should be located where they are most economical. Many projects are therefore carried out in emerging and developing countries, where they are also intended to help improve the economic, social and environmental situation and support the realisation of the United Nations’ Sustainable Development Goals. In addition, the conditions for renewable energy plants (solar, wind, water and biomass) are often much more favourable there. For emerging and developing countries, emissions trading is a key driver for the transfer of clean technologies and sustainable economic development.

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